

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

In the specification, paragraph number 35 has been amended.

Claim 3 is requested to be cancelled.

Claims 1, 4 and 13 are currently being amended.

Claims 14-15 are being added.

Claims 6-13 are withdrawn from consideration.

This amendment adds, changes and deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

Of the claims not withdrawn from consideration, claims 1-2, 4-5, and 14-15 are now pending in this application for consideration.

Rejections under 35 U.S.C. § 112, second paragraph

Claims 3-4 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. This amendment is moot with respect to claim 3, which has been cancelled. The limitations of claim 3 have been incorporated into claim 1. Claim 1 has also been amended to clarify that the first line segment and the second line segment form an inclination greater than a right angle. Claim 4 has also been amended to address the issues raised in the rejection. Accordingly, applicants submit that the rejection under 35 U.S.C. § 112, second paragraph has been overcome.

Rejections under 35 U.S.C. § 103

Claims 1-2 and 4-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,620,074 to Paul et al. (hereafter “Paul”) in view of U.S. Patent No. 6,072,141 to Slamecka (hereafter “Slamecka”). Claim 3 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul in view of U.S. Patent No. 5,055,639 to Schels et al. (hereafter “Schels”). Applicants respectfully traverse these rejections for at least the following reasons.

Independent claim 1 is directed to an electrode of a vacuum circuit breaker. The electrode includes a bent slit extending on the periphery of a cup member, where the bent slit is a combination of a first line segment substantially perpendicular to a reverse face of a plate shaped contact, and a second line segment continuously connected to an end of the first line segment. The references cited in the rejection fail to suggest the features of the electrode of claim 1, namely where: (1) the first line segment and the second line segment form an inclination greater than a right angle, and (2) the second line segment is substantially parallel to the reverse face of the contact.

In the Paul device, the slots 22 and 24 on the contact carriers 6 and 8, respectively, clearly are not segmented into two segments where one of the line segments, which is substantially perpendicular to a contact plate face, forms an inclination greater than a right angle with another segment of the slot, or that the another segment is substantially parallel to the contact plate face. Moreover, the remaining references of Slamecka and Schels do not cure the deficiencies of Paul.

Slamecka discloses in Figure 3 a contact I with a wall part 4 and gaps or slots in the wall part. As can be seen in Figure 3, however, the slots in the wall part include segments that meet at a right angle, in contrast to claim 1, where the first line segment and the second line segment of the slit form an inclination greater than a right angle.

Moreover, the features recited in claim 1 provides attendant advantages over the Slamecka structure. Machining the right angled slots of the Slamecka structure would be

expected to be more difficult than machining a structure where the first line segment and the second line segment of the slit form an inclination greater than a right angle. For example, Figure 1 of the present application illustrates an embodiment where the first and second line segments meet at a rounded portion, and thus the inclination is greater than a right angle. Such a slit is easier to machine than the one of Slamecka.

Schels also fails to cure the deficiencies of Paul. In the embodiment of Figure 9, Schels discloses slots with segments at right angles with respect to each other, in a similar fashion to Slamecka. Schels also discloses another embodiment in Figure 10. In the Figure 10 embodiment, however, the slots 320 are oblique, and are thus not substantially parallel to a reverse face of a contact shaped plate, in contrast to claim 1.

Furthermore, Schels does not appreciate the advantages of having slot segments with a relative inclination greater than a right angle (thus making machining easier), while at the same time having slot segments substantially parallel to the face of plate shaped contacts. Arranging the second slit segments substantially parallel to a face of the contact plates as in claim 1 provides advantages in creating a stronger field. As disclosed in the present specification on page 8, paragraph 27, when the slits are elongated circumferentially the magnetic field strength is increased. Thus, when the slits are substantially parallel to a face of the contact plates, they will have good circumferential elongation thus increasing the magnetic field strength. Schels fails to disclose any embodiments where both a first line segment and a second line segment of a slit form an inclination greater than a right angle, and additionally the second line segment is substantially parallel to the reverse face of the contact of the electrode.

In sum, none of the references cited in the rejection, alone or in combination, suggest the invention as recited in claim 1, where the first line segment and the second line segment of the slit form an inclination greater than a right angle and the second line segment is substantially parallel to the reverse face of the contact of the electrode.

For at least the above reasons, applicants submit that claim 1 is patentable over Paul, Schels and Slamecka, and respectfully request that the rejection under 35 U.S.C. 103(a) be

withdrawn. The dependent claims ultimately depend from claim 1, and are patentable for at least the same reasons, as well as for further patentable features recited therein.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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By Thomas G. Bilodeau

FOLEY & LARDNER

Customer Number: 22428

Telephone: (202) 672-5414

Facsimile: (202) 672-5399

Richard L. Schwaab

Attorney for Applicant

Registration No. 25,479

Thomas G. Bilodeau

Attorney for Applicant

Registration No. 43,438